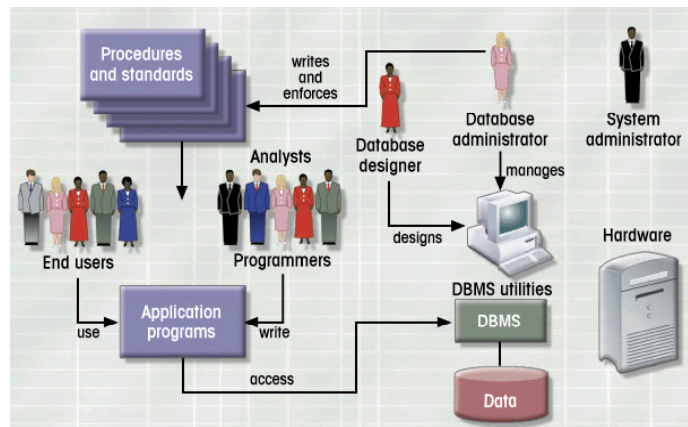


# INFO 464 2003 Fall Syllabus

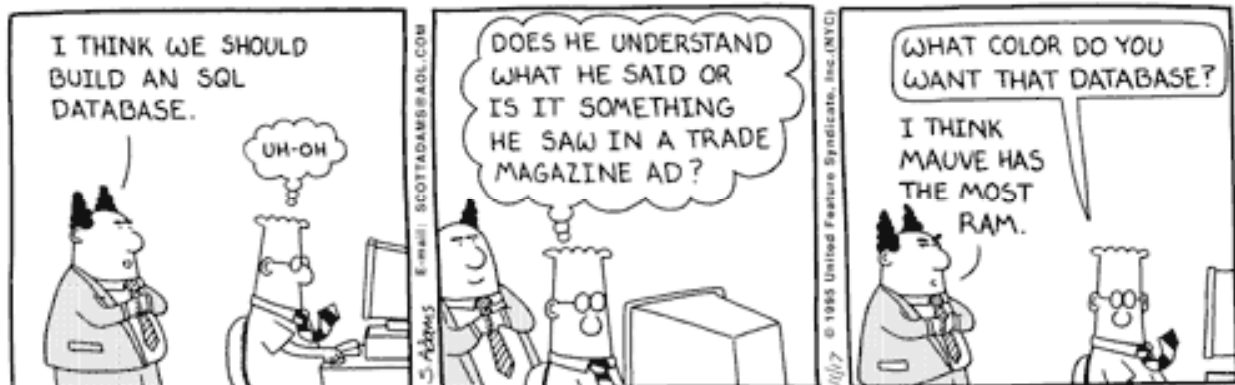


Course Title	Sect.	Ref. #	Time	Day(s)	Room	Building
Database Systems	902	12992	7:00 -9:40 PM	Thurs.	3130	Business

**Prerequisites** INFO 361, INFO 250, and junior standing.

**Catalog** Semester course. Designed to prepare students for development of systems involving databases and database management.

**Contact** 804.883.7594:home office  
804.828.0174:vcu office  
804.382.5957:cell phone  
928.244.8194:efax  
peter@datablueprint.com  
http://fast.to/peteraiken  
not my:Yesterday is history, tomorrow is a mystery and  
quote:today is a gift - that's why it's called the Present.  
logistics>Please note that on this message is likely to be coming to you from somewhere other than Richmond, VA as I travel supporting sponsored research for VCU & Data Blueprint.



**Instructor**

Peter Aiken. I received my doctorate in Information Technology from the George Mason University, School of Information Technology and Engineering in 1989. The school used the following definition of information technology:

*Information Technology is a discipline that encompasses the design, development, and application of hardware and software systems to facilitate human endeavors.*

- If you fax me any material please call and leave me a message so I can be certain to separate your fax from the others in the in-box.
- My office does not work very well so please don't call my office expecting to reach me. I get 5-10 call each hour asking, "Is this the MCV emergency room?" So I don't answer it. The VCU office phone rolls over to voice mail after three rings - you can always leave a message there for me. I check my messages regularly, especially when I'm traveling, and I will return your call.
- I spend about 50% of my research time working at my home office, please feel free to try to contact me there. At home I often hide from sales calls behind the answering machine. If you get the answering machine, press and hold any key on your touch-tone phone to by-pass the recorded message and please announce yourself. If I'm there, I'll pick up unless I'm attempting deep concentration. Regardless, please leave me a message - I will return your call.

**Office Hours**

My office hours are before my classes from 4:30 until 7:00 PM on Tuesdays and Thursdays and other times by appointment. Please call ahead to make an appointment to avoid standing in line or otherwise missing me. In addition to my regularly scheduled office hours, I'll stick around as long as required after evening classes to answer any questions.

**Schedule**

My class schedule for the Fall 2003 semester is:

INFO 464 on Thursdays 7-9:40 PM  
INFO 632 on Tuesdays 7-9:40 PM.

**Description**

This course is designed to enable the student to understand the importance of data management as integrated information systems components. Students will be exposed to database concepts as

central to the good design of information systems. In addition, students will be given opportunities to develop proficiencies in related database implementation tasks that typically include:

- Designing and implementing integrated database tables
- Developing SQL and PL/SQL applications
- Building GUI database front-end applications

Oracle's SQL, PL/SQL, and Developer 9i will be used to concretize the course's content theory.

Interestingly enough, the practical database development skills are very useful in obtaining employment upon graduation. However, learning the theory-based course components will result in significantly higher salaries over the medium to long term.

### Texts

Rob, Peter and Coronel, Carlos *Database Systems: Design, Implementation, and Management* 5th ed., (Course Technology, 2001 – ISBN 0-619-06269-X). Do not buy an older edition of this book. This book will be bundled with the Morrison book listed below.

Morrison, Joline and Morrison, Mike, *Guide to Oracle 9i* (Course Technology, 2003 – ISBN 0-619-15959-6). Do not use an older edition of this book in this course.

**Student Accounts** You need a LAN account to access the Oracle databases on the 2<sup>nd</sup> floor. See the lab monitor in room 2127/2129 to sign up for an account.

Problems with lab equipment on the 2<sup>nd</sup> floor should be directed to support staff in room 3134.

If you wish to use the department's workstations on the 4<sup>th</sup> floor, you need a LAN account to access System 2000 and the Oracle database. Details will be given in class.

Problems with System 2000 passwords or connections to Oracle databases should be directed to student consultants in room 4112 or 4102.

The School of Business keeps 2nd floor LAN accounts active for students in the Information Systems program, otherwise students get semester accounts. Anyone who has forgotten his/her

password for the LAN has to see Mike Tharp (room 3134) with a picture ID to verify their identity to get the password changed. He has to see an id (driver's license is fine) as specified by the auditors.

### Attendance

You are responsible for all material discussed in class.

### Grading

Quizzes	10%
Assignments	25%
First Exam	25%
Lab Exam on Developer 9	20%
Third Exam	20%

### Quizzes

There will be a quiz at the beginning of class every week on the material to be covered in lecture for that week with the exception of the first week. This means that students are expected to study the reading material before the weekly lectures. All quizzes and exams are OPEN BOOKS and NOTES. Therefore, understanding rather than memorization is emphasized. Be sure that you bring all reading materials and the lab manual to these exams. There is no borrowing of other students materials during these exams.

### Assignments

Assignments, Handouts, and Announcements are posted on the course web site at: <http://blackboard.vcu.edu/> See assignment 1 for instructions for accessing this site. Students are responsible for checking the course web site daily for new postings.

Expect on average an assignment each week. Grading of some assignments will be by sampling of questions and answers from the assignment material submitted by the student. Each week's worth of assigned homework is of approximate equal course grading weight. However, an assignment due in two weeks is usually worth twice the course weight of an assignment due in one week, if the amount of work in an assignment due in two weeks is approximately twice that of one week's work. Some homework assignments, especially those of a tutorial nature may or may not have deliverables to be submitted for grading. If an assignment has no deliverables for grading as an assignment, its content most likely will present itself for grading during the exams.

There are two types of assignments:

1. Written Assignments. These are done individually. Students are encouraged to check their answers on a computer, if possible.

## 2. Computer Lab Assignments (Oracle assignments).

Some lab assignments will be collected for grading. Others, of a purely tutorial nature will not be collected. Although you will work in teams for the lab assignments, you individually will be responsible for being able to demonstrate your proficiency with all of the Oracle material covered in the course. There will be an individual proficiency exam on Oracle's Developer 9i.

It is recommend that you work in teams of two persons for lab assignments. When submitting material for team grading, put the names of both team members at the top of the first page.




It is the student's responsibility to maintain diskette and paper backups of all materials submitted for grading.

### Required Fine Print (Fall)

<b>Religion</b>	Friday, September 5 <sup>th</sup> is the deadline for students to provide advance written notification to instructors of intent to observe religious holidays
<b>Graduation</b>	Friday, September 19 <sup>th</sup> is the last day for degree candidates - to submit graduation applications to you advisers for degrees.
<b>Withdrawal</b>	Friday, October 29 <sup>th</sup> is the last day to withdraw from a course with a mark of "W".
<b>Disabilities</b>	Students with special requirements must inform the instructor of these within the first two weeks of the semester. The University Office of Academic Support must also certify these requirements in order to receive special considerations.
<b>Weather</b>	If classes are canceled due to inclement weather, any scheduled tests or assignment due dates will be automatically moved to the next regular class meeting. Please check the website at: <a href="http://www.vcu.edu/weather/">http://www.vcu.edu/weather/</a>
<b>Ethics</b>	Students must abide with the University computing ethics policy.
<b>Holidays</b>	"It is the policy of VCU to accord students, on an individual basis, the opportunity to observe their traditional religious holidays. Students desiring to observe a religious holiday of special importance must provide advance written notification to each instructor by the end of the second week of classes. Instructors are encouraged to avoid scheduling one-time only activities, which cannot be replicated, on these dates. Faculty members are expected to make reasonable accommodations to students who are absent because of religious observance through such strategies as providing alternative assignments or examinations or granting permission for audio or video recordings and the like."
<b>Honor Code</b>	All submitted work is considered "pledged" according to the VCU Honor System. Cheating and plagiarism are unacceptable and will be handled in accordance with the Academic Integrity Policy as specified in the <i>VCU Resource Guide</i> .

Except in those cases where teamwork has been expressly permitted all work must be done individually by each student.

### Tentative Schedule

Week	Date	Text	Chapters	Coverage
1	8/21			Course Introduction
2	8/28	R&C M&M	16 11	Guest Lecturer on Data Administration Oracle Database Administration
3	9/4			<b>Mandatory DAMACV Meeting 4-6:PM @ Dominion Virginia Power Innsbrook Technical Center 5000 Dominion Blvd.</b> (See <a href="http://www.dom.com/contact/dir_itc.jsp">http://www.dom.com/contact/dir_itc.jsp</a> for directions.)
		R&C	13	Data Warehousing
4	9/11	R&C	1	File Systems and Databases
5	9/18	R&C M&M	2 1 & 2	Guest Lecturer on Relational Model Client Server/Creating   Modifying Tables
6	9/25	R&C	3	Entity Relationship Modeling
7	10/2	R&C	4	Normalization
8	10/9	R&C M&M	5 3 & 4	Structured Query Language SQL   PL/SQL
9	10/16			 <b>First Exam</b>
10	10/23	R&C	6	Database Design
11	10/30	R&C M&M	7 5 & 6	University Lab: Conceptual Design   Oracle Forms
12	11/6	R&C M&M	8 7	University Lab: Conceptual Design Verification, Logical Design, and Implementation   Reporting
13	11/13	M&M	8	Integrated Database Applications
14	11/20			Individual Proficiency Lab
15	11/27			 <b>Thanksgiving Day Holiday Break</b>
16	12/4	R&C	9 & 10	Transaction Management   Concurrency Control   Database Distribution
17	12/11			 <b>Third Exam</b>